

A City Without Steel:

The Stabilization, Revitalization and Connection of a Declining Industrial City – Youngstown, Ohio

by

Caroline Jean Wallace

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Committee in charge:

Professor Elizabeth Macdonald (Chair)

Professor Michael Southworth

Professor Peter Bosselmann

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The Master of Urban Design Thesis
of Caroline Jean Wallace

is approved:

_____ Date _____
(Chair - Professor Elizabeth Macdonald)

_____ Date _____
(Professor Michael Southworth)

_____ Date _____
(Professor Peter Bosselmann)

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Dedication:

For my Mom, Betsy Wallace, without whom this year would not have been possible.

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Chapter 1 – Introduction

The Stabilization, Revitalization and Connection of a Declining Industrial City Youngstown, Ohio



Figure 1: Abandoned Railway Bridge crossing the Mahoning River

Photo By: C. Wallace

This thesis focuses on the declining industrial city of Youngstown, Ohio. It explores urban revitalization and takes into account the necessity to stabilize the city first. In order to achieve this, creating more connections within the city is imperative. I have explored this through study and design and will discuss further in later chapters.

Youngstown, Ohio was chosen for thesis study for a variety of reasons which include; historic value, sense of place, sense of community, existing infrastructure, interstate proximity and emotional attachment. Perhaps the strongest reason was the emotional tie that I have to the city. Having grown up in one of the bedroom communities that serve this city, I know the value of the area and feel a certain closeness to the city.

As I went through the MUD program at Berkeley, I found myself drawing comparisons to Youngstown in relation to the discussion topics that occurred within the classroom. I came to realize that this city had much more to offer than it was currently providing and was drawn to study it. It's a city that has been lying in wait for the steel mills to return and it has only just begun to recognize that it has more than steel to offer its community at large.

With that said, the steel mill history is what makes Youngstown unique both historically and currently. There are remainders of its history throughout the entire city from warehouses to railroads.



Figure 2: Existing Warehouse Entrance.
Photo by: C. Wallace



Figure 3: Railroad Tracks, adjacent to the Mahoning River & under Market St. Bridge.
Photo by: C. Wallace

The steel mill history gives Youngstown its identity and sense of place. When looking at the value and potential of this place, its history is what makes it a unique city and will not be soon forgotten. In the lifetimes of many longtime residents Youngstown was a bustling vibrant city to live in and visit. In the 1950's & 1960's it was a booming steel city, however, in the 1970's the mills started to decline and by the 1980's they had all but dried up. Over the past three decades the population has shrunk not only in the city of Youngstown but also in the region as a whole. This shrinking population is unique in America today as very few cities are currently experiencing a population decline.

The main source of employment has historically been steel refinement and production. Many families had

generations working alongside one another at the plants. Once the majority of the steel mills closed the doors in the 1980's there were a great many people out of work.

Since steel mill work was a high risk job, it therefore was a high paying job. There was simply no other comparable work available to fill this void. This factor contributed heavily to the flight of the citizens. People left the region to look for jobs elsewhere. Some of them went to the bigger Steel Belt cities for jobs within their skill set and pay range. These cities were able to keep their mills open longer than Youngstown, but ultimately lost them as well. As a result, while these cities suffered a decline due to steel finding new homes overseas, they did not suffer as hard as Youngstown which experienced a substantial flight of its long time residents.

This city of Youngstown was also chosen for study because of its close proximity to a major interstate, I-80. It is well situated at the center of the Steel Belt and helped, along with the other steel cities, to service the

whole of America for many decades with its industry. It is located within a short drive to many of the major Steel Belt cities including, Cleveland, Pittsburgh and Detroit. It is also less than a day's drive to New York City.

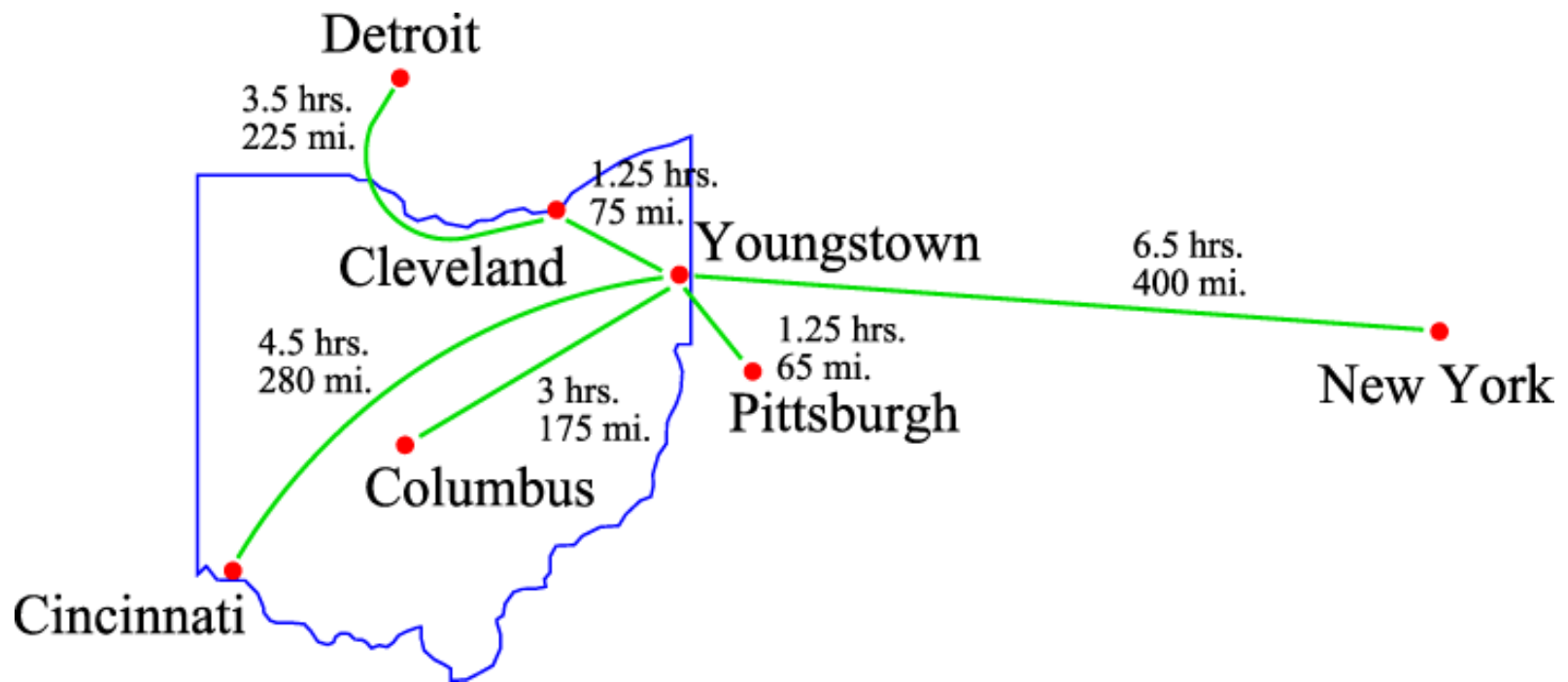


Figure 4: Regional Distance Diagram
Diagram by: C. Wallace

The region known as the Steel Belt has been recently more commonly referred to as the Rust Belt. Alas, the new nickname is as appropriate as the previous one. Included in this region are the previously mentioned cities; Pittsburgh, Cleveland, and Detroit. These cities are drawing more national attention than Youngstown, due to their sheer size. They are getting more national funding and in addition, design charettes have taken place to address the problem of these cities losing their traditional base for employment. These cities have generally been more successful at revitalizing their broken downtowns and rusting steel yards, as I will describe in the case studies. But, Youngtown has often been overlooked.

There are a few local movements in the area of Urban Design within the city of Youngstown. These have been mainly due to grass roots movements, citizens speaking out at public meetings and internet blogging on the subject. These blogs include “I Will Shout Youngstown” which is supported by John Slanina (<http://shoutyoungstown.blogspot.com/>) and “Defend Youngstown” with Phil Kidd at the front. (<http://www.defendyoungstown.blogspot.com/>) Both these men were too young to have seen Youngstown in its height. Therefore, they don’t see the city for what it was, but for what it can be. Additionally, a new mayor, Jay Williams, has been instrumental in re-envisioning Youngstown as a city with a future. He’s making bold moves to embrace the city’s current size and allow for appropriate development within that context.



Figure 5: View to northwest on Federal Street.
Photo by: C. Wallace

Youngstown is a perfect location to redevelop and reinvest, because it already has the infrastructure in place to support a large population of people. Rather than expanding outward into more of America's agricultural lands, we should develop within pre-existing city limits. As suburban sprawl overtakes much of the country and land is being used up for housing and strip malls, it is becoming more important to look at areas of the country that already have infrastructure in place and can be revitalized. We need to be looking at urban infill opportunities, rather than continuing to consume the fertile lands outside city borders. I chose to look at Youngstown, which is a place that not only has existing infrastructure, but also excellent freeway access.

I have selected to examine the city core of Youngstown. With that I was able to create a more comprehensive plan for the city. Originally I was only looking at a warehouse site on the Mahoning River adjacent to the downtown core of Youngstown to focus on. But as my studies progressed, I realized there was a greater opportunity and value in encompassing the entire city. It allowed me to focus on connections and revitalization that would support growth from the inside out. Within this framework, the opportunity exists for new residential, retail and commerce. These elements would be set either within historic buildings or situated within newly proposed structures. The warehouse site is still a part of the proposed plan, although only a piece.

The city of Youngstown is situated on the Mahoning River. This creates an opportunity that should not be wasted; to clean it and revitalize it. After decades of industrial use along the river, it has yet to fully recover. There are many avenues in which to restore the Mahoning River to its original integrity, while still respecting its importance to the city's industrial past. This thesis offers a proposed solution. There is currently a chance to open up the waterfront to human activity, both for new and old residents.

The river seems to be a place where walking/biking paths could connect to the downtown through open space. In order to make a good trail system along the river's edge, the trail would have to coexist with an active railroad, which is the historic B&O line. This rail line runs along

the Mahoning River adjacent to an existing warehouse which is a part of the proposed redevelopment site. Careful consideration is taken as to how to handle the interaction between walking trails and train movement. This juxtaposition presents a situation which allows education on the history of the region and the rail system that helped to service it for so many years.

This thesis will provide a site analysis including a timeline of Youngstown's history. Also included within this document are three case studies of similar industrial areas located within the Steel Belt. These studies are in the cities of Pittsburgh, Detroit and Cleveland. The design chapter presents 4 diagrams of the important areas and edges and provides a foundation for the concept plan. Youngstown State University and its role in the city

will be discussed. Focus will then shift to the role of the automobile and a parking strategy, a linkage plan and proposed street sections will be presented. Finally the design looks at the riverfront and its revival with the reinvented existing warehouse, an inviting approach to drawing people into the proposed adjacent open space, and the dual use and purpose of a tree plantation.



Figure 6: The Mahoning River
Photo by: C. Wallace



Figure 7: Historic Downtown
Photo by: C. Wallace



Figure 8: Historic B&O Railroad Bridge over Marshall Street
Photo by: C. Wallace

Chapter 2 – Site Analysis

The Stabilization, Revitalization and Connection of a Declining Industrial City Youngstown, Ohio

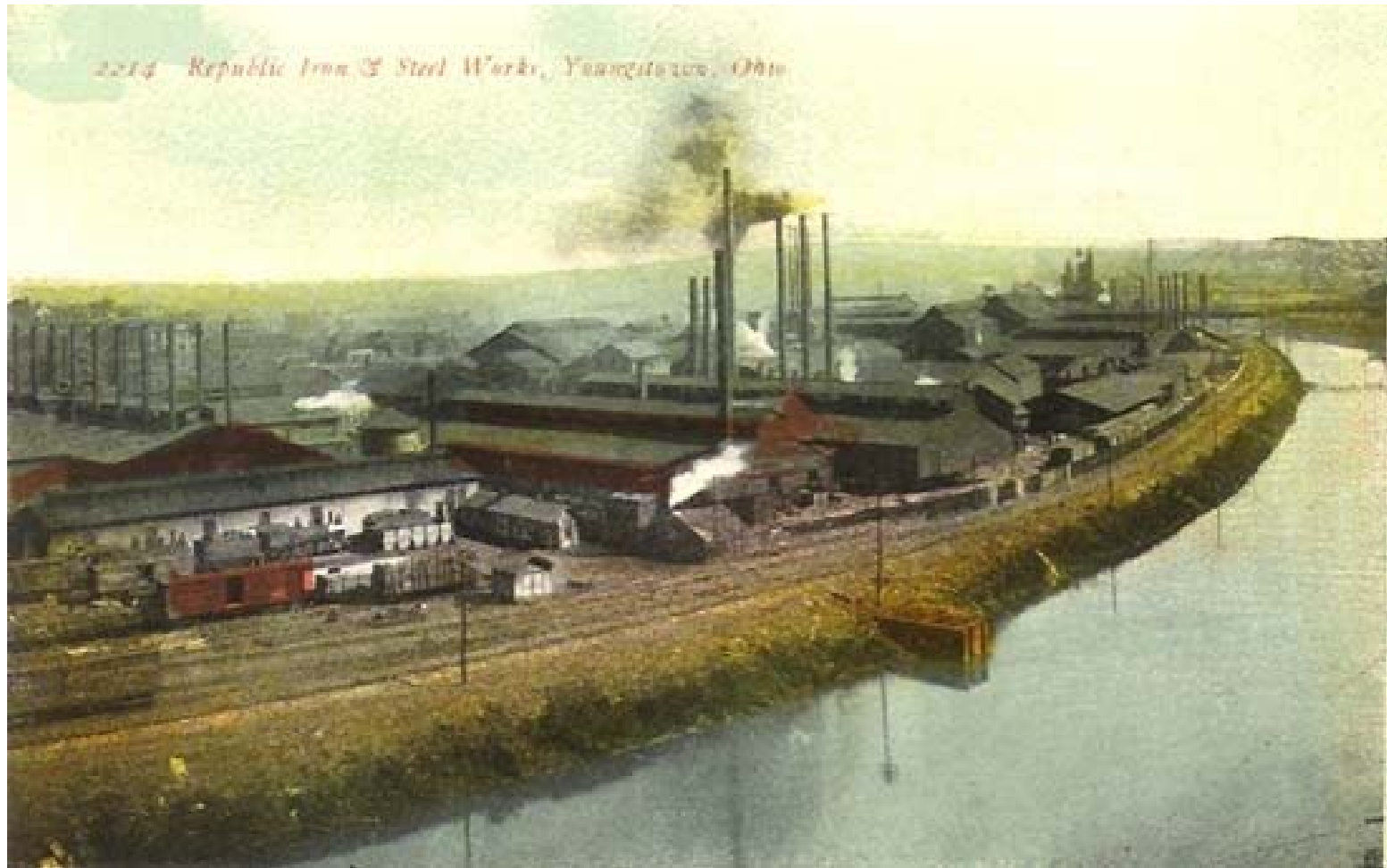


Figure 9: Republic Iron & Steel Works, Youngstown – 1916

Source: <http://www.burghamfamilytree.com/Places%20pages/youngstown.htm>

.youngstown, ohio timeline.

1719 ~ Purchased/Founded by John Young

Part of the Connecticut Western Reserve

15,560 ac site -part of 3,000,000 ac total in the Reserve

1802 ~ Recorded plot August 19

Young laid out the plan of the city with surveyors

The city layout is essentially the same today

1800 ~ Census 15 houses

1810 ~ Census 793 people

1820 ~ Census 1035 people

1839 ~ Pennsylvania-Ohio Canal opens

Inexpensive transport between Lake Erie & Ohio River

Created additional trade and growth for the city

1840-1860 ~ Population grows to 5,300

Grew with the demand for metal during the Civil War

1880 ~ Census 15,435 people

1880 ~ Telephone lines installed

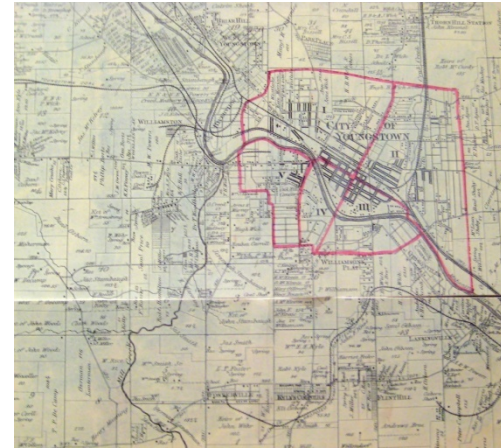


Figure 10: 1874 Map of Youngstown, Ohio

Source: D.D & Velma Davis Education & Visitor Center



Figure 11: 1905 Map of Youngstown, Ohio

Source: U. S. Geological Survey

1888 ~ Incandescent Lighting installed on Federal Street

1904 ~ 22 cars owned by city residents

1916/1919/1920 ~ Steel Mill Strikes and violence

1920 ~ Census 132,358 people

1921 ~ Second city in steel production behind Pittsburgh

1930 ~ Census 170,002 people – historic maximum

1937 ~ "Little Steel" strike

Results in Congress of Industrial Organizations (CIO)

1950-1960's ~ Post War Boom

1970 ~ Decline Begins

Today ~ Shrinking Population 80,000 people

Timeline Source:

www.burghamfamilytree.com/Places%20pages/youngstown.htm

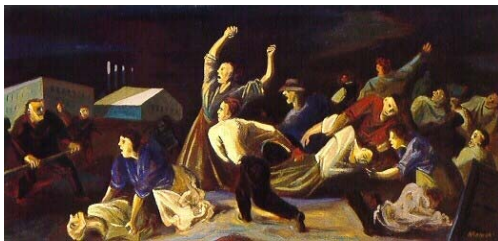


Figure 12: "Youngstown Strike" by William Gropper (1916)

Source: www.burghamfamilytree.com/Places%20pages/youngstown.htm



Figure 13: 1951 Map of Youngstown, Ohio

Source: U. S. Geological Survey

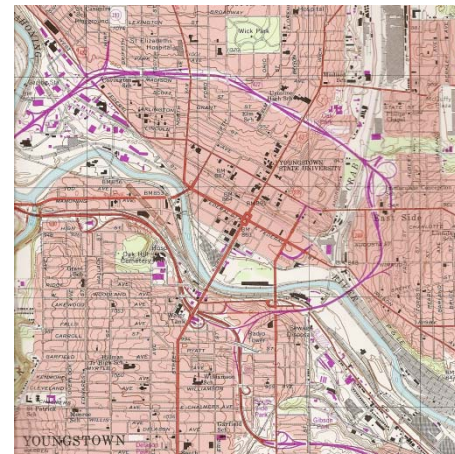


Figure 14: 1997 Map of Youngstown, Ohio

Source: U. S. Geological Survey

Youngstown is located in Northeast, Ohio. It is surrounded by a network of freeways including Interstate-80. This connects the city to the entire county, from New York City in the east to San Francisco in the west.

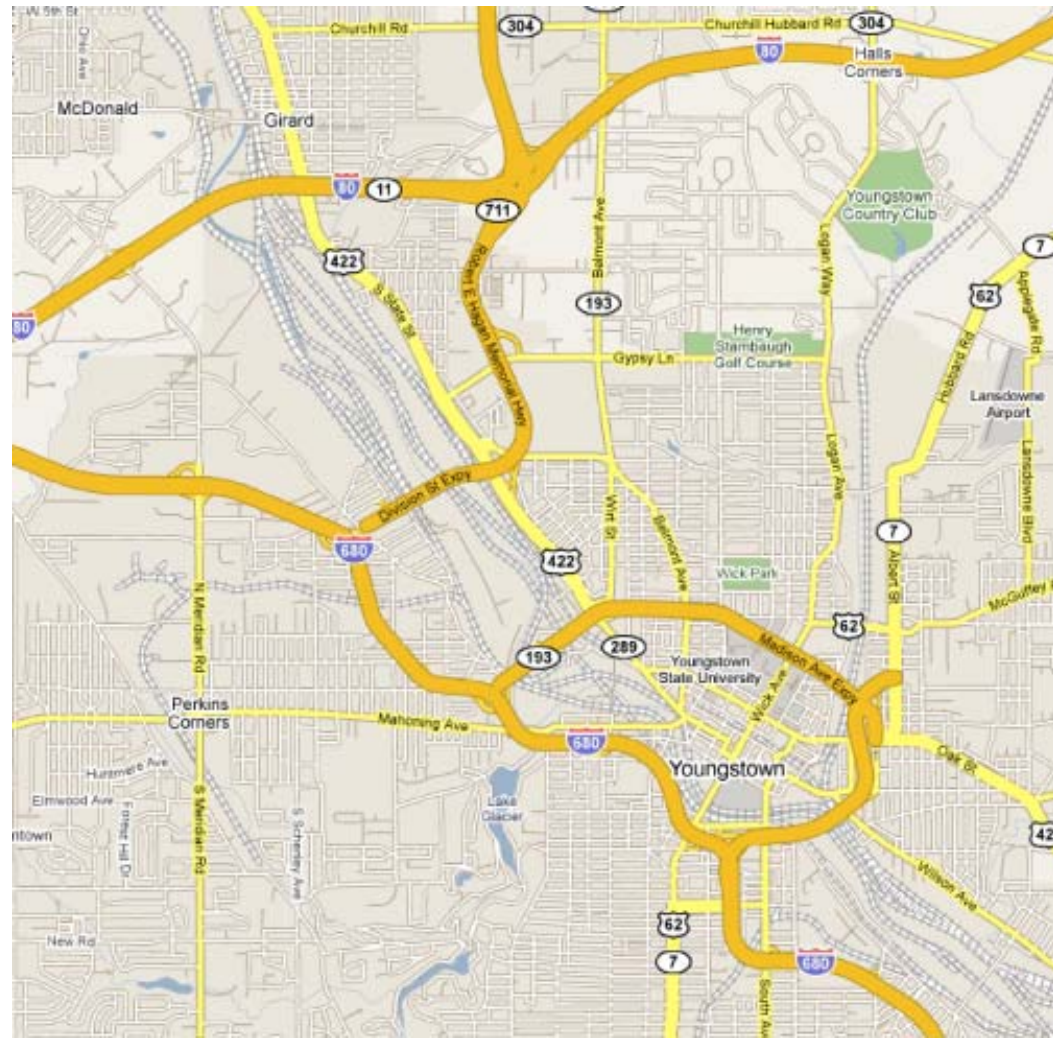


Figure 15: Vicinity Map
Source: Google Maps

Youngstown has a rich history which is deeply rooted in the American Steel production of the industrial age. A portion of the study area that has been selected for redevelopment respects and honors this historical tradition. The riverfront area includes a warehouse and is set along the banks of the Mahoning River; much of this area is located within the 100 year floodplain. This fact will dictate appropriate public uses and be a driving force behind the design.

A rail line runs along the river adjacent to this portion of the study area. Another rail line is located on the opposite river bank as well as. Currently trains run on both of these lines; the use occurs several times a day,

but is not constantly in use. Sensitive design and a possible combining of the two lines will be considered.

This riverfront has excellent downtown access but is not properly tied into the urban fabric. There is also a new convocation center located on the Mahoning River which is sponsored by GM. It has been named the Chevy Center because the Chevy Cobalt is manufactured in a nearby town, Lordstown. A minor league hockey team, the Steelhounds, call this arena home during the winter months and it has become instrumental in drawing people back into the declining downtown district. Building off of the recent success of this venue will be valuable to the success of redeveloping the city. See Figure 16 for a graphic representation of the city areas.



Figure 16: Connections and Location Map
Diagram by: C. Wallace



Figure 17: Chevy Center – Home of the Steelhounds
Photo by: C. Wallace



Figure 18: Downtown Square with stature of John Young
Photos by: C. Wallace



Figures 19: Stature of John Young
Photos by: C. Wallace

As previously mentioned, the city sits on the banks of the Mahoning River. But, the city turned its back on the river because its banks were originally used to serve the steel factories. Therefore, connecting into the urban fabric of Youngstown and tying in the river uses would be desirable.

Considering regional context, there is a Metro Park nearby which has an opportunity to be connected via a walking path along the Mahoning River. Presently there is an informal walking path located along the river banks which is shown in Figure 22. The Metro Park is named Mill Creek Park and serves the region with passive and active recreation in addition to an Education & Visitor

Center located adjacent to the picturesque Glacier Lake which is shown in Figure 20.



Figure 20: D.D. & Velma Davis Education & Visitor Center
Photo by: C. Wallace



Figure 21: Glacier Lake at Mill Creek Park

Photo by: C. Wallace



Figure 22: Walking along the Mahoning River

Photo by: C. Wallace

Due to the loss of Youngstown's main industry, the city is struggling to keep residents from leaving behind homes and businesses. Youngstown has a shrinking population and has one of the largest losses of residents in the nation.

Youngstown was once the nation's third-largest steel producer, with its employees earning among the highest factory wages in America. Demand for their services was strong. "You could graduate from high school one day and start work in the mills the next," said Noga. That changed on Sept. 19, 1977 - Black Monday - when Youngstown Sheet and Tube abruptly closed its doors.

"Five thousand people showed up for work one day and were turned away," said Phil Kidd, Downtown Director

of Events and Special Projects for the city. "The city lost its heart and soul," said Mayor Williams. (www.cnnmoney.com. *The Incredible Shrinking City*)

The new mayor, Jay Williams, has backed an unprecedented plan called Youngstown 2010 Plan. The City of Youngstown and Youngstown State University coordinated the involvement and education of the community in the planning process. Plans from the early 1950's and 1970's anticipated a population of 200,000 to 250,000. The new plan is built upon the acknowledgement and acceptance that Youngstown is a smaller city of 80,000. It acknowledges future change and guides the city to reshape in a "cleaner, greener and more efficient city." (<http://www.youngstown2010.com/>)

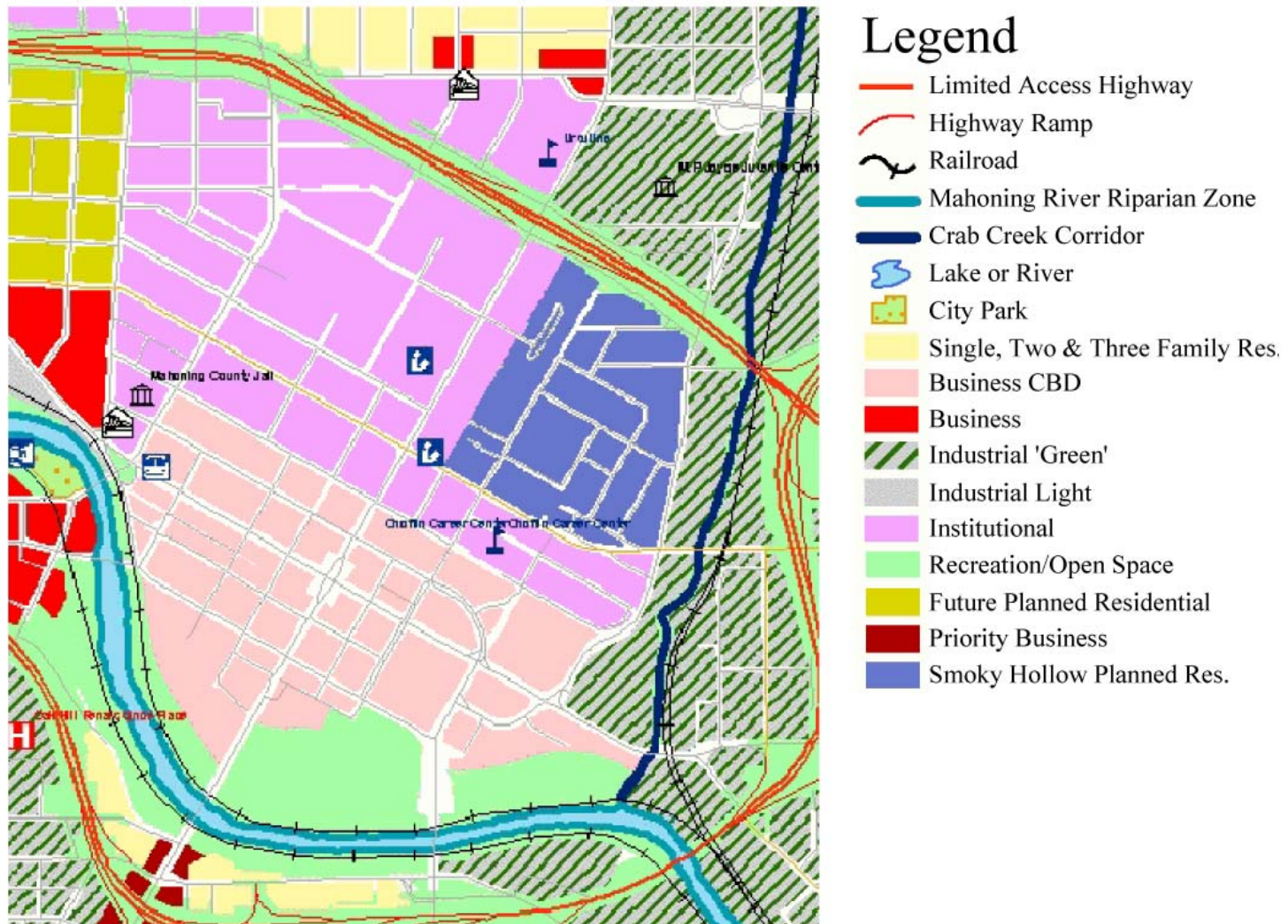


Figure 23: Youngstown 2010 Plan
 Source: <http://www.youngstown2010.com>

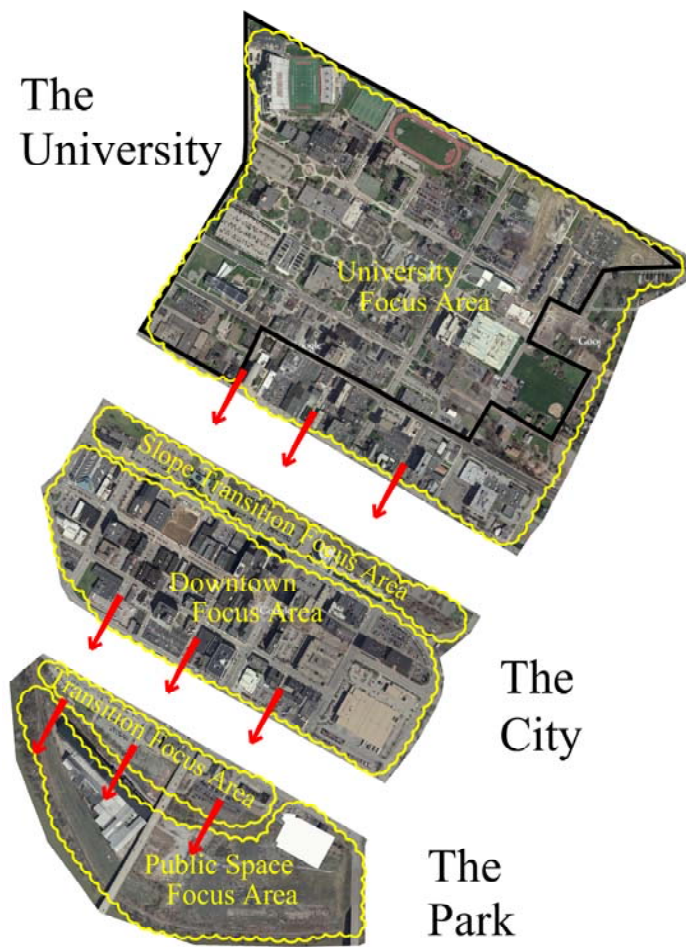


Figure 24: The Three Districts of Youngstown, Ohio
Source: C. Wallace

The city of Youngstown is made up of three distinct districts: The Riverfront, The Historic Downtown, and Youngstown State University. This configuration is illustrated in Figure 24.

These areas are the focus of the design. They are currently loosely connected, due to the former uses of land being incompatible and natural factors. The University is separated from the downtown by a natural ridge which once carried an important railroad. The riverfront is separated from the downtown because it was once an industrial area and was therefore unsuitable and unnecessary to visit. However, amazing opportunities exist with the potential connection of these three distinct and important districts of the city of Youngstown.

Youngstown is set on a gently sloping terrain. This allows for attractive views to open up when driving, walking or biking in a southeast direction. These views are all directed toward the Mahoning River where a wall of trees can be seen indicating the presence of a major water way. Previously this view was not desirable because it was oriented towards the factories that were located along the river. However, with the revitalization and/or removal of many of the unattractive factories, an opportunity is presented to take advantage of these natural and striking views.



Figure 25: Views from key roads towards the Mahoning River
Source: C. Wallace



Figure 26: Figure ground of Youngstown, Ohio
Diagram by: C. Wallace . Aerial Image Source: www.google.com

Chapter 3 – Case Studies of Postindustrial Cities

The Stabilization, Revitalization and Connection of a Declining Industrial City Youngstown, Ohio

With the case studies I will review 3 postindustrial cities, Pittsburgh, Detroit and Cleveland. Each one has dealt with their industrial decline differently, some more successfully than others. These three cities have several commonalities with Youngstown, Ohio. They are all located within the American Steel Belt, they have all lost the majority of their steel refiners over the past 3 decades and they all have a smaller population than was previously projected. Also similar to Youngstown, these cities have started to redefine their identities without the factories. Each has approached this problem in unique fashion.



Figure 27: Pittsburgh Site Detail



Figure 28: Detroit Site Detail



Figure 29: Cleveland Site Detail Photos by: C. Wallace

.pittsburgh.

The city of Pittsburgh and its boroughs have been very successful in revitalizing and reinventing itself as something other than just a steel mill city. It has accomplished this in many ways, from the reclamation and redevelopment Point State Park to a recent development in the neighboring town of Homestead. The city of Pittsburgh recognized early that the heyday of the steel boom was coming to an end and began to focus on new opportunities while revitalizing its downtown. This foresight opened up opportunity to some of its neighbors to start their own revitalization as the region and affordability was attractive to developers. The city of

Homestead became a place of interest for investment in the mid 90's.

The redeveloped industrial site is located on the historic steel mill site of Homestead Steel Works which is set on the Monongahela River. This is just across from the city of Pittsburgh and is only a 10 minute drive to the city.

Homestead Steel Works closed down in 1986 and the local economy slumped. The region as a whole was declining at this time. It was sold 2 years later to the Park Corporation, who did nothing with it but let it stand and decay. It was resold in 1996 to Continental Real Estate who began drawing up plans for site reuse. The plans included dining, retail and entertainment. In 1999

the ground was broke for this 256 acre project that became known as The Waterfront.

The Waterfront in Homestead is a mixed use area built on historic industrial land. Many changes were made to the physicality of the site. However, history was noted with the inclusion of existing smokestacks which were retained as monuments to maintain the industrial quality of the site.

Within the site is a wide array of uses. Including apartment living situated along the river, walking trails and sidewalks connecting the residents with the river and the site, office spaces near to the residential component, convenient shopping, an abundance of dining options, a

hotel and even a Cineplex. This redeveloped site has become both a place to live as well as a destination. This site has been very successful in maintaining an industrial quality as well as providing the local residents things that they needed, like housing, jobs, and retail. The development directly influenced the increase of value in the housing market within the once declining surrounding community.



Figure 30: Homestead Steel Works – historic. (Note smoke stacks.)
Source:<http://www.cmu.edu/steinbrenner/brownfields/Case%20Studies/pdf/waterfront1.pdf>

The Waterfront has been instrumental in taking the City of Homestead out of municipal bankruptcy, Act 47.

While there have been many obvious benefits gained from the development of this site, there are some things that could have been done better. According to personal interviews with the developers conducted by Neeharika Sinha, “The development was based on a suburban model.” She also suggests that the water on the riverfront is essentially inaccessible. “It sits on the water, however, the development effectively blocks off direct use of the water.” (<http://www.cmu.edu/steinbrenner/brownfields/Case%20Studies/pdf/waterfront1.pdf>)

The underutilization of the riverfront is an important observation in this development. An opportunity was missed. Another opportunity missed was in the overall design and the use of a suburban model. Being set in a predominately urban environment, a more intensive use of land would have been more appropriate.



Figure 31: River edge inaccessible because of fence
Photo by: C. Wallace



Figure 32: Preserved historic smoke stacks in Homestead, PA at the Waterfront
Photo by: C. Wallace

.detroit.

Detroit is a postindustrial city that has been looked at from a revitalization standpoint many times over the years. A group of architecture and urban planning students from University of Michigan participated in a design charrette which looked at redeveloping the river's edge in 2003. Since that study was completed, Detroit has begun development along the riverfront with the backing of the Detroit RiverFront Conservancy (DRFC).

Now known as the Detroit RiverWalk, this urban pedestrian amenity is located along the Detroit River waterfront, which was in part sponsored by General Motors (GM). Their office building is situated alongside

the Detroit RiverWalk. This public space has begun to encourage new redevelopment adjacent to the site. New housing has been proposed on vacant sites, as well as, the proposals for the refurbishing of old warehouses for loft living. All along the riverfront are signs of revitalization.

The RiverWalk has a hard edge to the Detroit River, thus keeping with the man-made quality of the region. There are steps that lead down to the water's edge where boats and barges can tie off for concert's and events. Detroit is in a relatively cold climate, yet this past winter people were using the space for walking, bike riding, and skating. This space has been a contributing factor to the emerging vibrancy of the Detroit Riverfront.

However, it does not tie in the greater city of Detroit. It serves the people who are already in the vicinity of the RiverWalk primarily GM employees. Direct pedestrian or non-motorized vehicle access is not offered. It therefore, serves as a destination to be arrived at by a car or a place for employees to eat lunch. There are several large parking lots and parking structures that serve this area. In analysis, it seems that the parking would not need to be so great had more walkable routes connected it to the downtown area of Detroit.



Figure 33: Detroit RiverWalk Flags
Photo by: C. Wallace



Figure 34: Detroit RiverWalk
Photo by: C. Wallace

.cleveland.

The last case study this thesis will explore is a project located in Cleveland, known as the Steelyard Commons. It is located on the site of the former steel factory, No. 2 Finishing Mill, on the western edge of Cleveland's industrial valley. It is conveniently located with excellent freeway access to Interstate-71; in Ohio known as the 3-C's highway because it connects Cleveland, Columbus and Cincinnati, and is only 2 miles outside of the downtown center of the city of Cleveland.

The Steelyard Commons is a very new project which just had its Grand Opening on September 1, 2007. It is located adjacent to an active steel mill, which adds to the industrial feel of the site. The site has been developed on

a brownfield, like the other two case studies. Many of the new buildings use elements salvaged from the site's former use. The buildings have been designed to represent the scale and materials of the industrial buildings which were once located on this site. The rooflines of the larger flagship businesses have tall open air structures that resemble historic mill structures. A small industrial museum will be located in the former "Clock House." This historic building that has been retained will be paired with a children's playground. This will allow for education to take place as the children play.

The landscape includes 20% of green space on site and over 600 trees. However, it falls short of offering any

truly usable space with the exception of the small children's playground. The design would benefit from a more comprehensive landscape plan which offered park space and green connections into the city.

The site also does not address the need for inclusiveness and there is no housing or offices located upon it. It is not a mixed-use site like its Homestead counterpart. This site is primarily a retail site, with the exception of the museum and the children's playground. The opportunity was missed to allow for a fully functional mixed-use area. It simply acts as a retail destination.

The reliance on the car is too important with this project as well. This site is predominantly a parking lot and

pedestrians are not effectively considered. Less parking or breaking the parking up would have added to the overall feel of the project when inside the site. As it currently exists it feels like a large sea of parking surrounded by chain retail and restaurants. It is the least successful of the case studies for these reasons.



Figures 35: Steelyard Commons parking and warehouse roof line
Photos by: C. Wallace



Figure 36: Steelyard Commons Museum (former Clock House)
Photo by: C. Wallace



Figure 37: Steelyard Commons Museum Signage
Photo by: C. Wallace



Figure 38: Active Steel Mill with Museum in Foreground
Photo by: C. Wallace

All three of these aforementioned sites have elements I explored in the design of my thesis project. Some have been more successful than others, in whole or in part. I drew from the more successful elements and came up with an appropriate design for Youngstown that meets the needs of the current and future residents alike.



Figure 39: Active Steel Mill seen from across the Detroit River
Photo by: C. Wallace

Chapter 4 – Design

The Stabilization, Revitalization and Connection of a Declining Industrial City Youngstown, Ohio

In my design I interconnected the three areas of downtown. As mentioned before there are three areas; The Riverfront, the Historic Downtown, and Youngstown State University. The design promotes revival of certain historic buildings in addition to introducing a few select buildings to fill in the gaps in the urban fabric. There were a few areas that were more heavily concentrated on than the whole. Youngstown State is by and large intact with few missing buildings. Though it is looking to expand because it is experiencing growth in population and therefore funding. Enrollment at YSU hit a 14 year high in September 2008 increasing to 13,712 up from 11,787 in 2000. “YSU also reported

that 1,291 students are living in on-campus housing. It is the highest number of students ever to live in on-campus housing at YSU and is an increase of 300 since fall semester 2000.” (<http://cfweb.cc.ysu.edu/marketcomm/view.cfm?articleID=1626>) The university is a viable revenue generator for the City. With this in mind it becomes an integral part in the overall revitalization of the community at large. In an effort to not over design the City of Youngstown, I chose to focus on key areas within the core of the city. The design, therefore, focuses on edges and corresponding areas to help weave the city back into itself.

.university & historic downtown.

The first edge I explored was the University/Historic Downtown Edge. The edge happens along a natural ridge that occurs on the south side of Wood Street. This ridge was formerly a rail corridor and creates a distinct separation between the downtown and the expanding university edge.

The design proposes to extend the boundaries of Youngstown State University and to bring the campus right up to the natural edge of the city. Due to topography, limits on land development are present, thereby creating a logical green transition between the complementary uses. This edge serves as a conversion

area from the University and Downtown. The design proposes to reclaim many vacant buildings which can be restored to their original integrity and use them for classroom space and other University functions. There will also be new buildings proposed to complete the streetscape and fill in the holes which occur along Wood Street. Figure 40 is a diagram that represents the University/Historic Downtown Edge.



Figure 40: The “University/Historic Downtown Edge” - Occurring along Wood Street
Existing buildings shown in black and proposed buildings shown in red
Diagram by: C. Wallace

.historic downtown & federal street.

The next section I looked at is the Historic Downtown/Federal Street Area. This is the heart of the city. Federal Street is the historic east-west street with a central square that is positioned at the intersection of the historic north-south street, Market Street.

Over the years many businesses have closed their doors and buildings have become dilapidated. Often these buildings are torn down for health and safety reasons leaving gaps in the urban fabric. My proposal fills in these vacant spaces with new buildings and suggests revitalization for the remaining vacant buildings on the street. Additionally, a small food market is proposed

within this area. Figure 41 is a diagram that represents the Historic Downtown/Federal Street area.



Figure 41: The “Historic Downtown/Federal Street Area” - Occurring along Federal Street
Existing buildings shown in black and proposed buildings shown in red
Diagram by: C. Wallace

.historic downtown & riverfront.

The next edge I looked at was the Historic Downtown/Riverfront Edge. This edge was the most difficult edge because the riverfront was used for industry for so many years and it was unsightly. Therefore, the city turned its back upon it. The design works with the existing conditions and strengthens the connection between the two formally separated uses.

The design proposes four-story mixed use buildings to serve as a new neighborhood for the city. The Chevy Center is fast becoming a draw for many city residents and neighboring city residents. The mixed use aspect of these buildings will be able to serve event goers with

small cafes and shops. The housing will provide living space to young professionals, students, and professors alike. Figure 42 is a diagram that represents the Historic Downtown/Riverfront Edge.

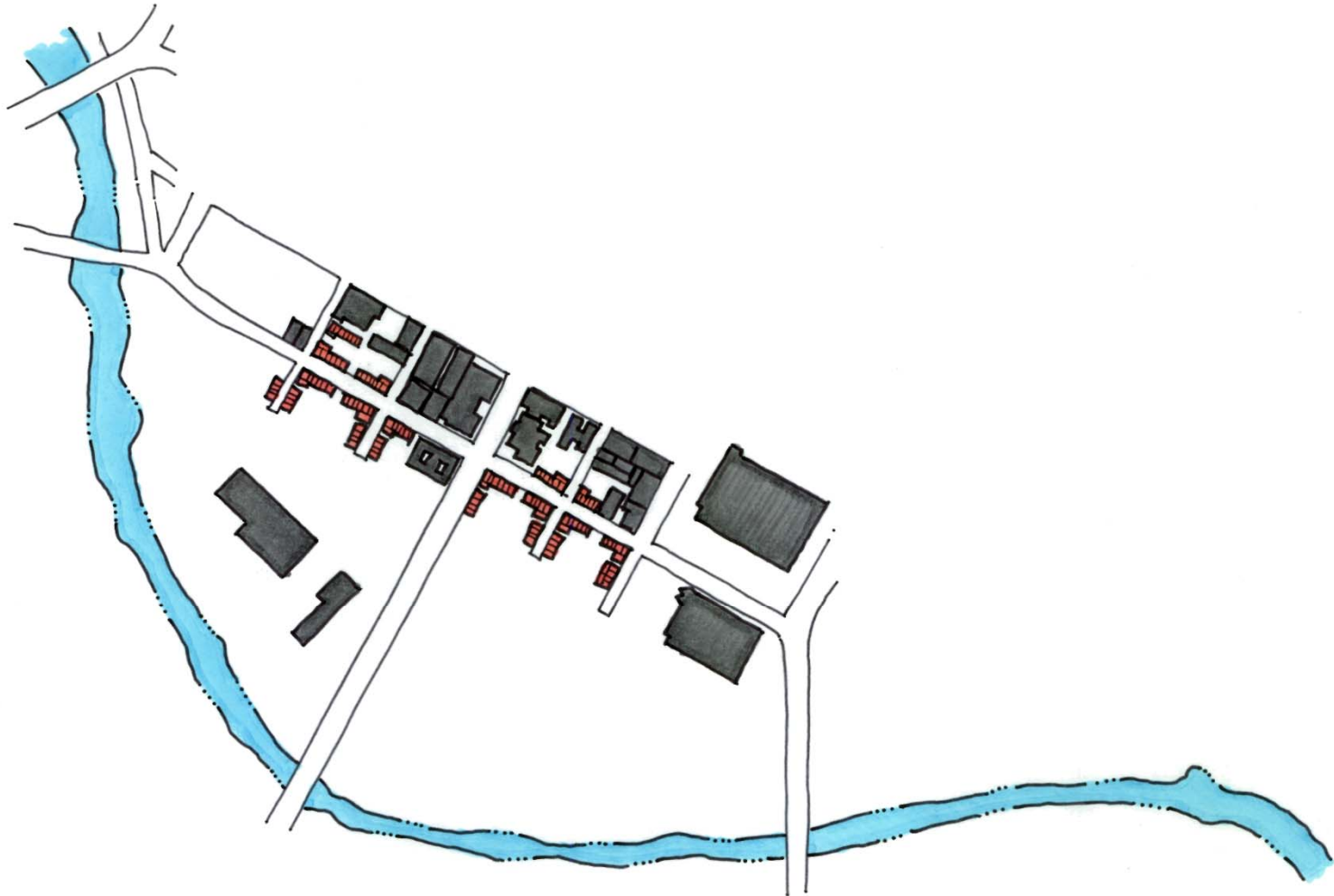


Figure 42: The “Historic Downtown/Riverfront Edge” - Occurring along Front Street
Existing buildings shown in black and proposed buildings shown in red
Diagram by: C. Wallace

.public & private.

The last area is the Public/Private area and it has the most connection to the proposed park. It allows for existing building retention as well as new residential opportunity. The proposed residential buildings are placed to face the park, putting eyes on the public space. They will be two-story townhomes with garage parking.

The design of the park respects the history of the land which it sits upon. By retaining portions of the mill that was once majestically producing steel not so long ago, a sense of place is established. Retaining the working rail lines allows for another node to the past and serves as a

reminder of the once booming steel industry. The park design also makes efforts to link the public spaces with the private spaces. This space also serves to link the built environment to the natural environment. Figure 43 is a diagram that represents the Public/Private area.

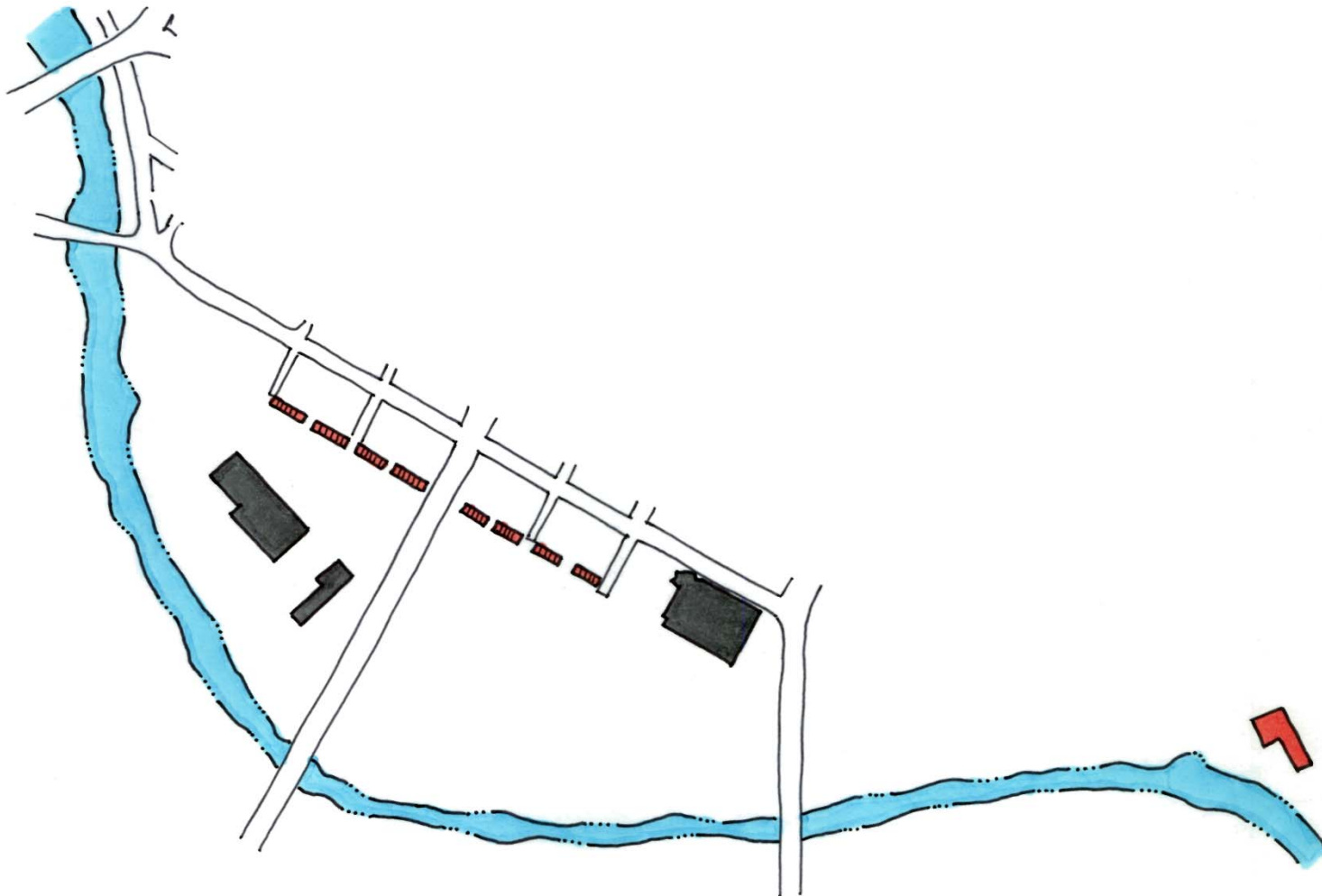


Figure 43: The “Public/Private Area” - Occurring along the former industrial site
Existing buildings shown in black and proposed buildings shown in red
Diagram by: C. Wallace

These four diagrams are the framework from which the overall concept plan draws from. The design recognizes and emphasizes the importance of linking the city, retaining historical buildings, expanding the university, proposing housing and retail. It also proposes to fill in voids in the city where buildings once stood, thus filling in obvious gaps in the urban fabric. By doing this the city becomes even more cohesive in design and more walkable for its residents.

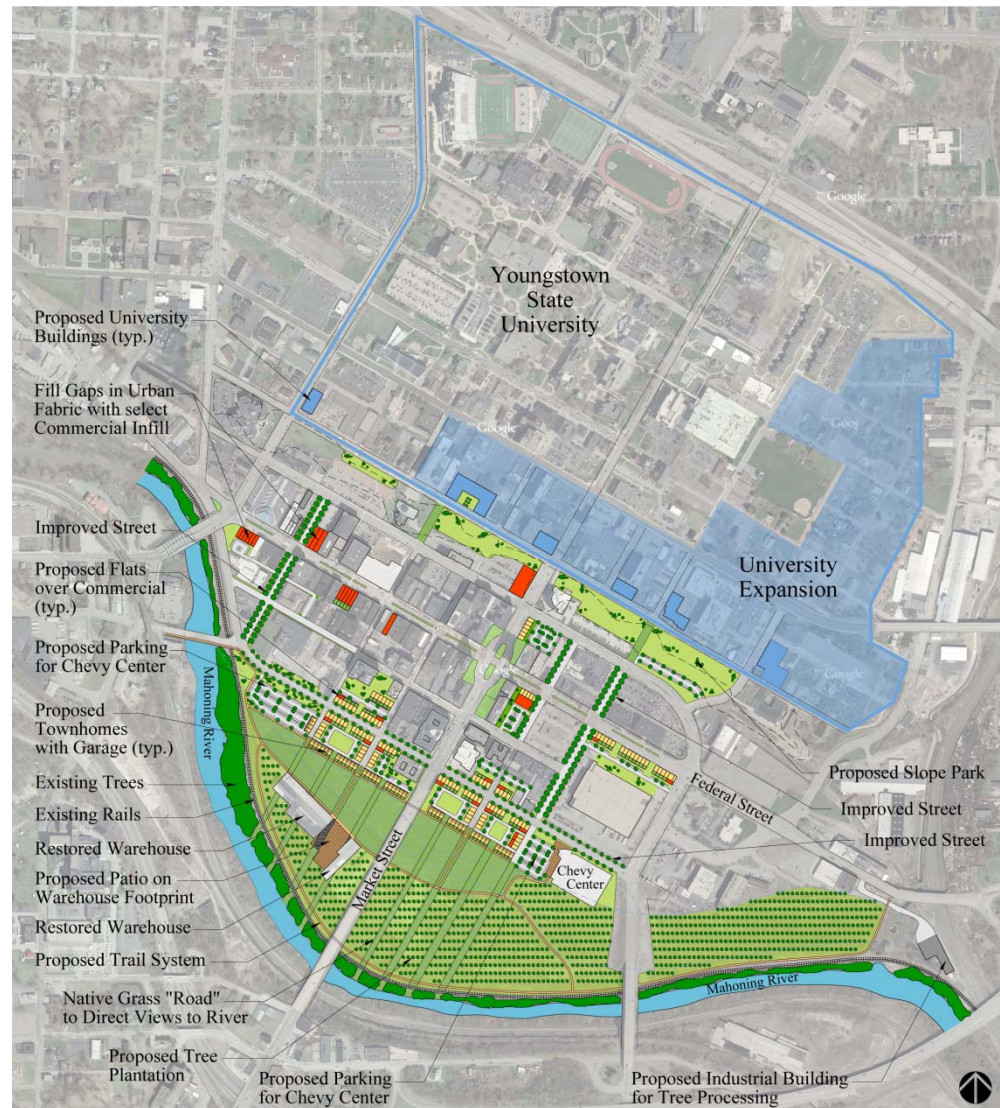


Figure 44: Concept Plan for the City of Youngstown

Drawing by: C. Wallace

.the university.

The university area is proposed expand in a different way than the proposed Youngstown 2010 plan. This design suggests that the existing industry would be retained on the eastern edge. This will allow the road to be fronted by industrial uses on both sides rather than having the university face the industrial uses on the opposite side. New educational and housing buildings for the university will be interspersed with existing refurbished building.

The city does not have a great deal of money due to the loss of industry and the economic decline that has followed, therefore, care is taken to not over design the urban fabric. The addition of housing and minor retail

along Front Street adjacent to the Mahoning River will serve young professionals, university employees and students alike. The proposed buildings along Federal will encourage vibrancy to return to the city center.

The riverfront development occurring along Front Street and down to the warehouse has been laid out to add to the new vitality that has long been missing from the area. The proposed development rides on the newfound interest in the area that the Chevy Center has captured. With a minor hockey league just being introduced to the City of Youngstown, the time is ripe for new development to occur within this area.

.commercial and residential development.

A small portion of Youngstown will be developed for commercial and residential purposes. Since this area is experiencing population shrinkage, the development is modest in nature. Less than 200 dwelling units are proposed with a mix of townhomes, condominiums and apartments. The intent is to serve the young professionals

who have been repopulating the downtown area, as well as, the students, faculty and staff of Youngstown State University. It has primarily been located along the existing road adjacent to the open space site, Front Street. This street is underutilized and the new development will serve as a link between the newly opened riverfront and the existing downtown.

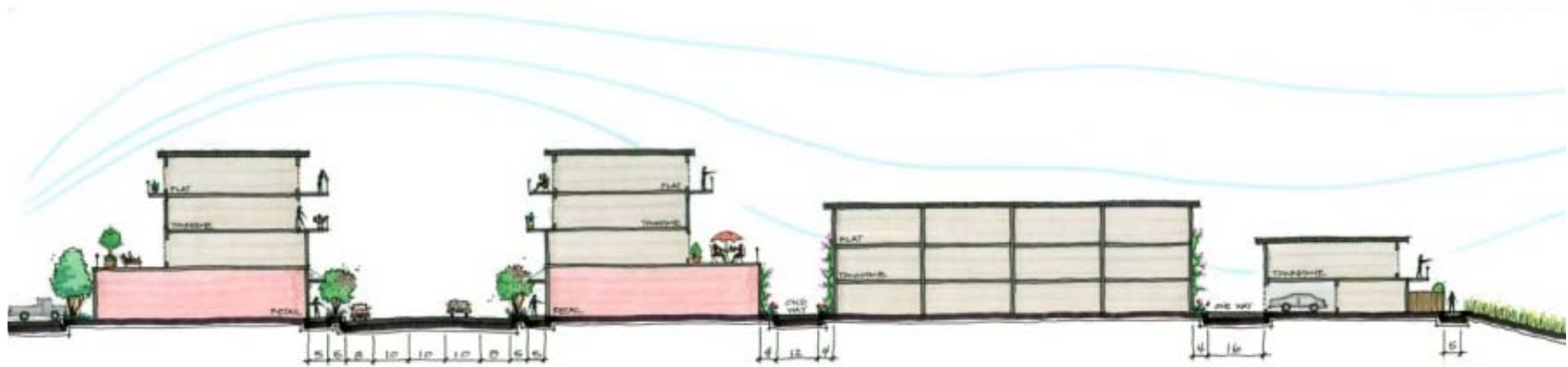


Figure 45: Proposed Commercial/Residential ~ 3-story flats over commercial (in red), 3-story flats and 2-story townhomes facing river
Drawing by: C. Wallace

.parking.

Parking is the least attractive portion of urban design; however, with proper consideration and placement it can serve the city in positive ways. The design proposes to break up and relocate the majority of the parking in the large parking lot that is adjacent to the Chevy Center. The parking for the Center will be reduced so that the existing parking located throughout the center of Youngstown is used to accommodate larger numbers of people at various events. The necessary event parking will be interspersed throughout the city and people will be encouraged to use the abundant street parking. This parking will only be moved a short distance away from the structure, keeping in mind the seasonal changes in a

place like Youngstown. With the relocation of parking, the path of travel for the ticket holders will then be located along Front Street, Market Street and Federal Street. This will encourage the people to be patrons to the new and existing retail. Retail, restaurants, coffee shops and bars should see an increase in business due to more pedestrian traffic in the area. Furthermore, the vast parking areas located in the city center which are only used during the daytime hours will now have need in the evening and weekend hours. Consequently, the reduction in the Chevy Center's adjacent parking will increase the use of the empty parking lots located near to the center. The anticipations are that with time, retail and consumer demand will grow, thus increasing the value of the land that the parking lots are located on.

Once the price of land is more valuable to site a structure upon, then the parking lots will be reduced in number and more habitation and commerce will come into the city, which will enliven the city further.



Figure 46: Parking Plan for Chevy Center depicting Path of travel for pedestrians.
Drawing by: C. Wallace

.linkage plan.

A linkage plan proposes modes of transportation by means other than automobiles. This is all done by way of pedestrian travel, bicycle routes and an express shuttle with limited stops.



Bus & Bike Circulation Diagram

Figure 47: The "Linkage Plan"
Existing buildings shown in black
Diagram by: C. Wallace

.streets.

In order to better serve the community and the city, several streets were redesigned to encourage less vehicular traffic on them and more pedestrian and bicycle traffic. In many cases, the streets of Youngstown were designed to accommodate traffic that the city has never received. It has a much smaller population than that of the projections in the 1950's and 1970's when the former General plans were approved and accepted. These streets were designed for population growth not shrinkage.

The larger right-of-ways, however, do present a distinct opportunity. By narrowing street surfacing, a larger path

of pedestrian and bike travels becomes available. This strips of green allow for safe and comfortable travel through the city.

The green strip concept is further strengthened by incorporating small flowering street trees in-between the street and sidewalk. In addition to the ornamental trees, there will be rows of shade trees to line the streets placed in tree wells. The right-of-ways will remain the same, but the redesigned streets will feel more intimate and in scale with this beautiful small city.



Figure 48: Street Section Key Map
Drawing by: C. Wallace

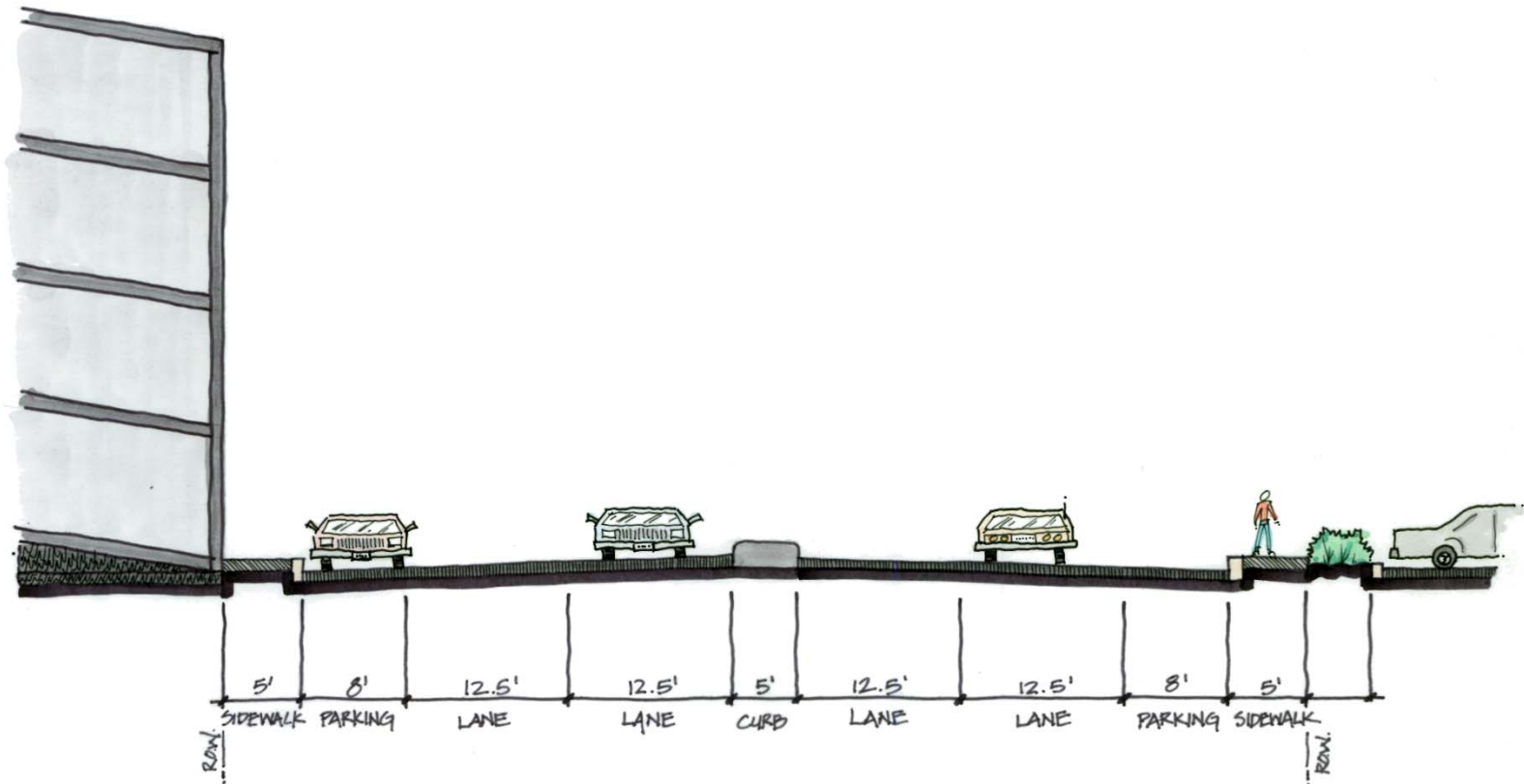


Figure 49: Street Section B-B Existing (N.T.S.)
Drawing by: C. Wallace

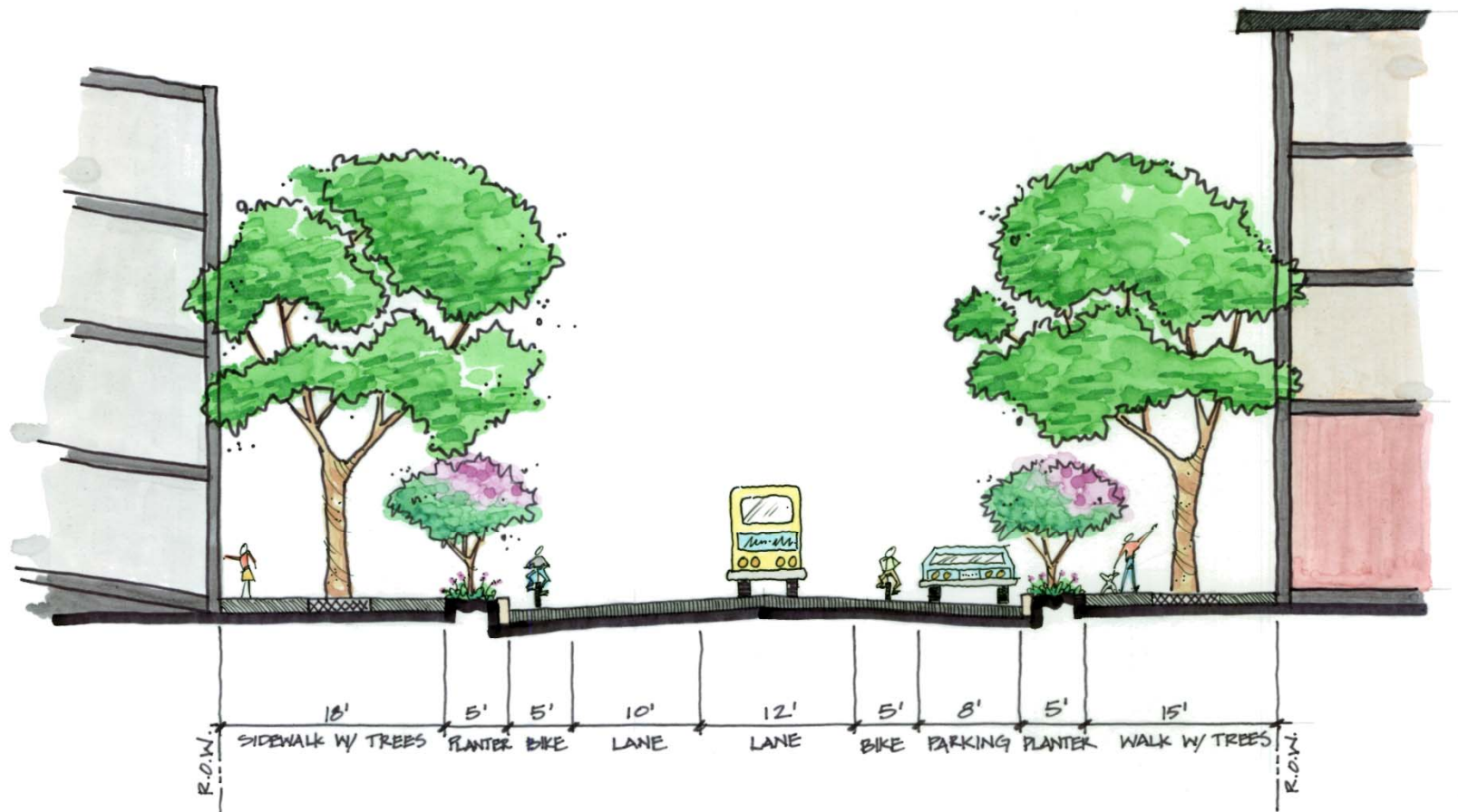


Figure 50: Street Section B-B Proposed (N.T.S.)
 Drawing by: C. Wallace

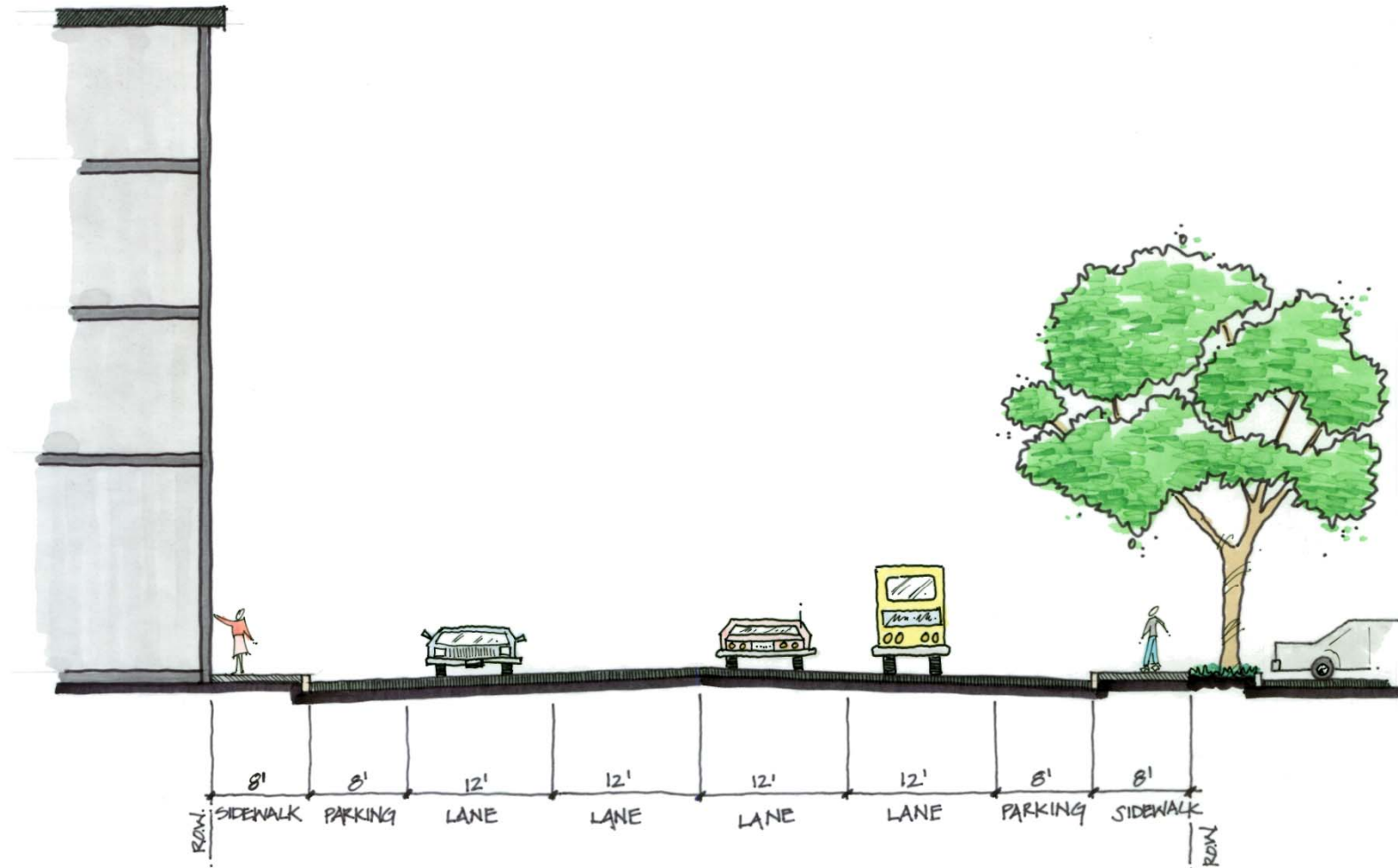


Figure 51: Street Section C-C Existing (N.T.S.)
 Drawing by: C. Wallace

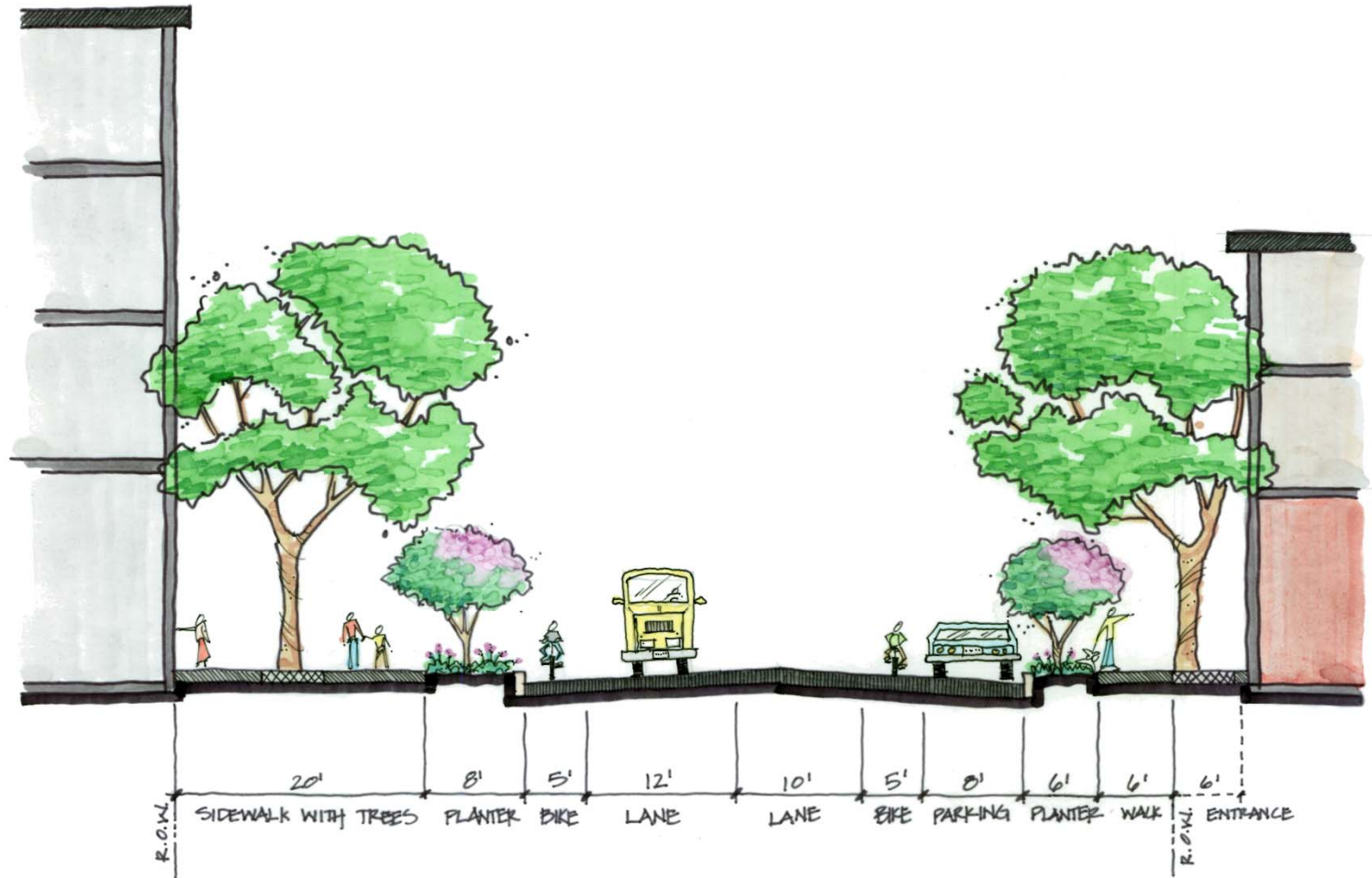


Figure 52: Street Section C-C Proposed (N.T.S.)
Drawing by: C. Wallace

.warehouse.

The warehouse will have an important role in the design. Over the years many additions have been added onto the original warehouse structure. Therefore, the proposal will preserve and restore the most historic and ultimately the most important segments. The warehouse will become a community center for the City of Youngstown. It will be filled with a variety of uses which could include a weekly or daily farmer's market, restaurants and possibly even retail. Furthermore, it could additionally function as a historical site with kiosks which inform users of the previous functions of the site as well as the overall history of Youngstown, the Mahoning River and the railroads.

In addition to serving the general public, areas will be set aside for classrooms that will accommodate the students in the Department of Geological and Environmental Sciences at the Youngstown State University. The location along the river and its association with environmental recovery of the area makes it ideal for setting up a research staging area for the University.

.inviting.

The design draws users into the proposed multi-purpose open space by sending green connections that extend from the end of the streets into the green areas. This extension of the city grid ties the riverfront into the city. By doing so, the city becomes more connected to the once separated river. This helps with the movement of people both to and from the new Warehouse Community Center as well as the existing Chevy Center. In addition, the waterfront becomes a hub of activity and helps to invigorate the city similar to places like Detroit and San Antonio. There will be connecting trails throughout the open space to serve the new residential, commercial, and the revitalized warehouse. In addition to service trails

there will also be regional trails that run along the Mahoning River utilizing the large railroad right-of-way. These trails will connect with the aforementioned Youngstown Regional Park, Mill Creek Park.



Figure 53: Warehouse Enlargement including Patio and Green Street Grid connections
Drawing by: C. Wallace

.tree plantation.

The design includes a proposal for a tree plantation. This plantation would not only serve as a visual statement, but also as an environmental one. The soil along the banks of the river has contaminates from a tradition of industry, particularly in steel. Heavy metals in the soil can be extracted with the use of certain trees. Deep root cleaning is currently recognized as a useful and environmentally sensitive way to extract contaminates from soil.

A study that was released by Purdue University on Jan, 15, 2008, shows the effectiveness of deep root cleaning. “Purdue University researchers are collaborating with

Chrysler LLC in a project to use poplar trees to eliminate pollutants from a contaminated site in north-central Indiana.” (<http://www.sciencedaily.com/releases/2008/01/080110144758.htm>) In the study it was found that poplar trees were the most effective tree for leaching the soils of heavy metals.

The design proposes the inclusion of trees to be planted in sustainable and geometric rows along the open space adjacent to the Mahoning River. This will clean both the soil and improve the quality of the water in the Mahoning River. Studies can be done by the Geological and Environmental Studies Department at YSU as to the effectiveness of this process. Soil samples can be collected prior to planting as a control group and will

continue to be collected as the trees run the course of their life cycle. This not only would benefit the city of Youngstown in an environmental way, but also the students who choose to study at the university.

It is expected that ultimately the trees will not be able to leech any more contaminants from the soil. After a certain period the trees would be cut and removed to make way for new trees to continue the process of cleansing the soil. The old trees would not end their usefulness at the stage of being cut down. Rather, they will be shipped less than a mile to an active mill. There they would be cut and used for wood products that would not be affected by the material containing higher levels of metal and other contaminants, perhaps paper. This act

of milling would complete the cycle of cleansing while respecting the tradition of industry in the city. Jobs would be created to plant the trees and maintain them. More jobs would be created for the removal and replanting of trees.



Figure 54: Open Space Enlargement depicting Tree Plantation – See Section A-A page 69
Drawing by: C. Wallace

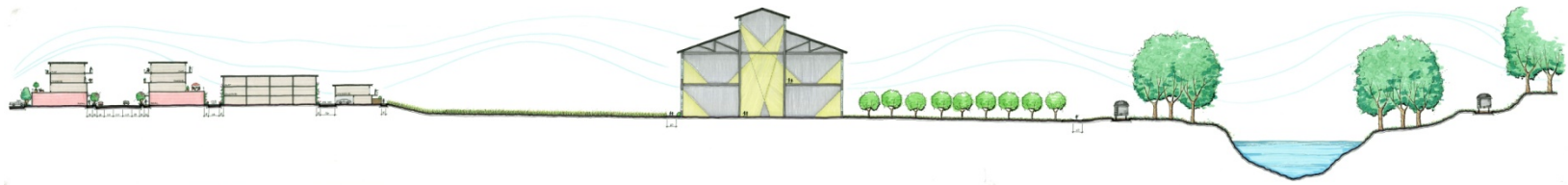


Figure 55: Open Space Section A-A depicting Tree Plantation, Warehouse in relationship to new development and the Mahoning River (N.T.S)
Drawing by: C. Wallace

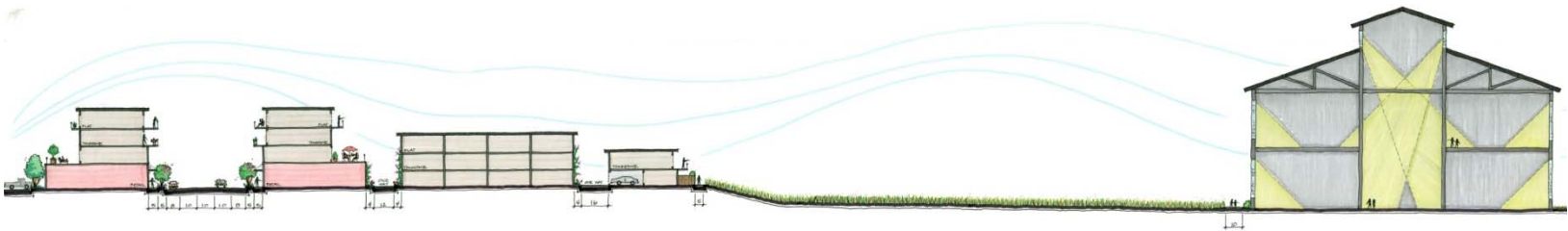


Figure 56: Open Space Section A-A Enlargement depicting Warehouse in relationship to new development (N.T.S)
Drawing by: C. Wallace

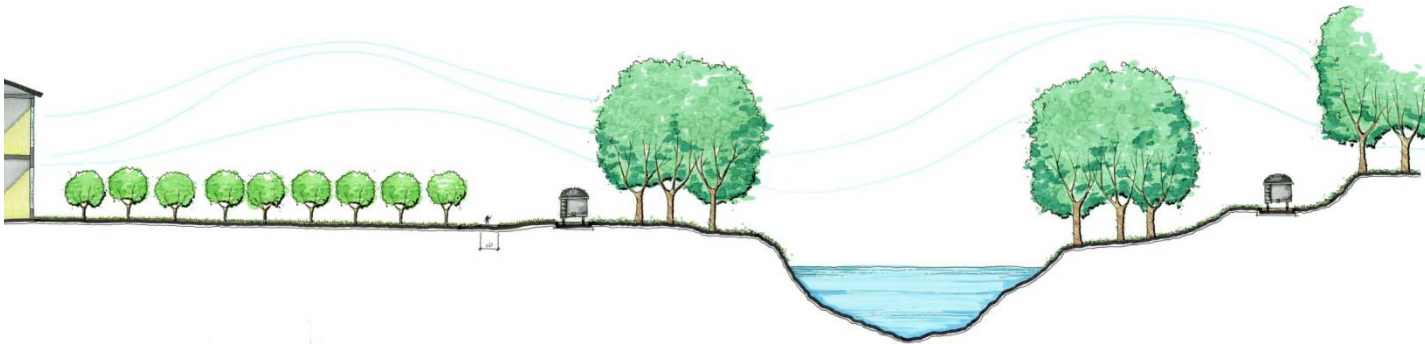


Figure 57: Open Space Section A-A Enlargement depicting Tree Plantation and Warehouse in relationship to the Mahoning River (N.T.S)
Drawing by: C. Wallace

Chapter 5 – Conclusion

The Stabilization, Revitalization and Connection of a Declining Industrial City Youngstown, Ohio

.conclusion.

The City of Youngstown, Ohio is a place with an amazing history, is home to an outstanding university and has a vibrant community. With all these positives, it is surprising that Youngstown is experiencing a population decline. However, with the loss of its main industry, steel production, this decline is an unfortunate truth.

The declining population does not have to be viewed as a negative; the city has an opportunity to embrace its smaller size and create an exciting place to live, work, and visit. The proposals set forth in this document

address this concept and propose ways to achieve harmony and balance. A livable, walkable and cleaner city can be the future for Youngstown. This can be achieved with narrower street widths, more open space, a cleaner riverfront, less off-street parking, the addition of bicycle and pedestrian routes, as well as responsible and reasonable development for housing and commercial.

Youngstown will be entering this century very unlike how it entered last century. It will usher in a new ideal separate from, yet rooted in, the history of steel which made it the place it was and will become.

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